

1 PROGRAMMABLE LOGIC DEVICE WITH
2 DECRYPTION ALGORITHM AND DECRYPTION KEY

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11 To prevent copying of a design implemented in a programmable logic
12 device (PLD), the PLD itself stores a decryption key or keys loaded by the
13 designer, and includes a decryptor for decrypting an encrypted configuration
14 bitstream as it is loaded into the PLD. The PLD also includes logic for reading
15 header information that indicates whether the bitstream is encrypted, and can
16 accept both encrypted and unencrypted bitstreams. The encryption keys may be
17 stored in non-volatile memory or backed up with a battery so that they are
18 retained when power is removed